### MORE THAN A ROAD

2015 ANNUAL REPORT



NOW IN OUR 25TH YEAR OF EXCELLENCE

### E-470 Route





E-470 toll plaza.

# A quarter of a century of innovation

#### DRIVEN TO ACHIEVE BREAKTHROUGHS IN SAFETY, SERVICE, SPEED AND STEWARDSHIP

E-470 entered its 25th year of operation in 2015, headed toward its June 1, 2016 anniversary. When that milestone arrives, there will be much cause for celebration, with many achievements having been made during the span of a quarter of a century.

- Since the time it first opened, E-470 has offered ExpressToll transponder-based tolling. This gave
  E-470 the distinction of being one of the first toll roads in America to offer open-road, nonstop tolling at highway speeds.
- Another major advancement in tolling was introduced in January 2009, when customers were provided the option of License Plate Toll (LPT), utilizing license plate photo images to generate toll bills mailed to the registered owner of the vehicle. E-470 was one of the first toll roads in the nation to offer this billing method.
- On July 4, 2009 all E-470 customers were freed from the hassle of stop-and-go manual toll payment.

E-470 closed its toll booths and ramp toll baskets and adopted all-electronic tolling (AET), with all tolls collected through either ExpressToll or LPT.

 E-470's ExpressToll Service Center also assists Colorado's other tolling agencies: the Northwest Parkway in Broomfield; the High Performance Transportation Enterprise (HPTE), which is a unit of the Colorado Department of Transportation (CDOT); and HPTE's concessionaire, Plenary Roads Denver (PRD). PRD operates the I-25 Express Lanes in downtown Denver and the Denver-Boulder U.S. 36 corridor, and CDOT operates the I-70 Express Lane, all of which utilize E-470's back office for tolling services. E-470 is proud of its role in assisting other agencies with tolling solutions to address regional traffic congestion problems and improve mobility and safety in Colorado.

# E-470 Public Highway Authority Leadership

#### **BOARD OF DIRECTORS**





**IOSH MARTIN** Chair Council Member, Town of Parker

HEIDI WILLIAMS Vice-Chair Mayor, City of Thornton



Secretary/Treasurer Commissioner, Adams County



BILL HOLEN Commissioner. Arapahoe County



DICK McLEAN Mayor, City of Brighton



STEVEN DOUGLAS Council Member City of Commerce City



ROGER PARTRIDGE Commissioner. Douglas County

#### **EXECUTIVE LEADERSHIP**

Mayor.

Director,

City of Aurora



TIM STEWART Executive Director



DAVID KRISTICK STAN KONIZ Director of Finance Deputy Executive Director of Operations



**JASON MYERS** Director of Tolling Services, Deputy Director of Finance



NEIL THOMSON Director of Engineering and Roadway Maintenance

MARSHA WILLIAMS Director of Information Technology

# E-470: The toll road and its owners

The 75-mph E-470 toll road forms a 47-mile semi-circular beltway around metropolitan Denver's eastern area and provides an entrance to Denver International Airport. E-470 connects in the south to the I-25/C-470 interchange in Douglas County, and in the north to the I-25/Northwest Parkway interchange in Adams County. The highway was built in segments, with the first segment opening in June 1991 and the final segment opening in January 2003.

The toll road has been financed, constructed, operated and maintained by the E-470 Public Highway Authority and is not taxpayer funded. The authority is a political subdivision of the State of Colorado, operating as an "enterprise" under state statute and thus is self-sustaining, generating its own revenues without recourse to taxpayer funds. The authority is composed of its eight member jurisdictions, those being five municipalities (Aurora, Brighton, Commerce City, Parker, and Thornton) and three counties (Adams, Arapahoe and Douglas). Each jurisdiction has one voting member on the eight-member E-470 Board of Directors.

#### Non-voting Local Governments

- City of Arvada
- City and County of Broomfield
- City of Greeley
- City of Lone Tree
- Weld County

#### **Non-voting Agencies**

- Colorado Department of Transportation (CDOT)
- Denver Regional Council of Governments (DRCOG)
- Regional Air Quality Council (RAQC)
- Regional Transportation District (RTD)

TWO



CDDT's new U.S. 36 Denver-to-Boulder Express Lanes. E-470 developed and installed the necessary ExpressToll all-electronic toll collection infrastructure. The ExpressToll Service Center handles tolling and customer service for CDDT's concessionaire, Plenary Roads Denver. *Photo courtesy of CDDT*.

# E-470: Now more than a toll road

#### Today an essential component of statewide transportation improvements.

# RECORD TRAFFIC AND TOLL REVENUES, TOGETHER WITH EXPANSION OF OUTWARD-FACING TOLLING SERVICES, HIGHLIGHTED 2015

E-470's record of achieving unprecedented levels of success continued in 2015.

It was a year of significant accomplishments, boosted by one of the nation's strongest economies and a burgeoning population with a growing affinity for E-470's safety, speed, service and stewardship.

2015 brought record-setting increases and positive trends – more customers, more revenues and more toll transactions. Through its ExpressToll Service Center, E-470 assisted the Colorado Department of Transportation (CDOT) with tolling solutions to statewide transportation challenges. E-470 did so by serving as the tolling and customer service hub for CDOT's growing number of tolled facilities.

#### E-470'S GROWING POPULARITY ADDS UP TO RECORD TRAFFIC, RECORD REVENUES

Traffic and net toll revenues surged to new highs in 2015, further bolstering E-470's already strong financial foundation.

- Traffic, as measured in the number of toll transactions, grew 12.4% over 2014.
- Net toll revenues grew 15.0% over 2014.
- Bond debt service coverage exceeded the required ratio substantially.

Wall Street took note of these successes, rewarding E-470 with a ratings boost from all three bond rating agencies in conjunction with a 2015 bond transaction.

# MORE THAN A ROAD. REDEFINING E-470'S MISSION, WIDENING ITS SCOPE.

E-470's ExpressToll Service Center has provided its toll collection services for the Northwest Parkway (since 2003) and CDOT's I-25 managed lanes in central Denver (since 2006).

The scope of E-470's toll collection support to CDOT grew significantly in 2015, and will continue to grow in coming years. This is due to CDOT's immediate and longterm program to add capacity to congested highways by utilizing new tolled Express Lanes. The result is the emergence of the ExpressToll Service Center as being more strongly positioned as the statewide "one-stop toll shop" for tolling, billing and customer service.

E-470 foresaw that CDOT's managed-lanes program would greatly expand the public's acceptance of tolling and grow the number of ExpressToll and License Plate Toll customers substantially. Additional tolled facilities in new corridors in 2015 brought more customers to ExpressToll through account creation; these new facilities are providing operational economies of scale for E-470. All costs incurred by the Authority for other toll facilities are recovered or reimbursed from the applicable toll operator of each facility under Toll Services Agreements.

More details on how the scope and the branding of ExpressToll were transformed in 2015 are found on pages 9 and 10.

#### EMBARKING ON A MAJOR ROAD WIDENING PROJECT

E-470 began design work in 2015 to expand an eightmile stretch of the tollway between Parker Road and Quincy Avenue, widening the road from two lanes to three lanes in each direction. The project is estimated to cost the Authority over \$88 million and will include a multi-use pedestrian and bike trail. The widening is being constructed now in order to get ahead of the curve on future traffic volume, which has had double-digit growth in each of the past three years. An investment-grade traffic and revenue study commissioned by E-470 in 2014 indicated that widening of this segment of the road would be needed in order to ensure safe and reliable travel for E-470's customers. The project will be entirely self-funded from E-470 reserves. Construction is planned to start in the spring of 2016 and is targeted for completion by early 2018.



Colorado Governor John Hickenlooper signs S.B. 90. Representing E-470, from left, are: former E-470 Executive Director John McCuskey, Vice Chair Heidi Williams, board member Bill Holen, Deputy Executive Director and Director of Operations Dave Kristick. At right: State Senator Nancy Todd, who introduced the legislation.

#### LEADING THE WAY ON MUCH NEEDED LEGISLATION

Colorado's temporary vehicle registration tag design often has posed problems with legibility. This has made it difficult for the Express Toll Service Center to identify and bill License Plate Toll customers displaying these tags. The unreadable tags have also presented a problem for law enforcement.

After several years of effort and with the cooperation of the Colorado Department of Revenue, the Division of Motor Vehicles, Colorado Department of Public Safety and CDOT, E-470 in 2015 initiated legislation (S.B. 90) that was signed into law to create uniformly readable temporary vehicle license plates. The new license plate policies go into effect July 1, 2016.

#### PROVIDING FINANCIAL SUPPORT FOR A NEW LINK TO E-470

E-470's board of directors approved a \$2 million grant and a \$2 million loan to the City of Aurora for the purpose of extending E. 6th Parkway from Aurora's populous west central area to E-470's existing E. 6th Parkway interchange. Based on a recent study, the extension of E. 6th Parkway will benefit E-470, generating more usage and more toll revenues while helping to provide a needed transportation corridor for local customers and military personnel traveling to Buckley Air Force base.



#### PROMOTING TRANSPORTATION SAFETY

The E-470 Transportation Safety Foundation distributes grants to nonprofit organizations that promote transportation

safety. The foundation is a nonprofit organization, separate from the E-470 Public Highway Authority, and it raises its own funds. Every other year, E-470 helps sponsor a golf tournament to benefit the foundation. The 2015 tournament raised \$47,000 for the foundation.

The foundation in 2015 awarded \$2,500 grants to seven organizations, including the Children's Hospital Colorado Foundation for its program providing car seats and child passenger safety education classes for families in need. Safety improvements continue to be one of E-470's core values.



The solid red line east of South Parker Road in this aerial view shows the 8-mile stretch of E-470's road widening project in southeast Aurora. Details start on Page 3.

# A note from the Chair

Speaking on behalf of all my fellow board members, I want to salute and congratulate E-470's staff and partner organizations for helping E-470 have a record-setting, outstanding year in 2015. What a great way to enter our 25th year of operation.

Thinking back 25 years to 1991, when the first five-mile segment opened, linking I-25/ C-470 to Parker Road, E-470 was frequently derided by skeptics as "the road to nowhere."

What a difference a quarter of a century makes.

Today E-470 is 47 miles long, flanked by well-planned business and residential development. It is internationally acclaimed for its record of innovation and industry leadership. And as a "one-stop toll shop" for the entire state, E-470 is playing a key role in helping promote regional mobility by assisting CDOT in its forward-thinking, managed-lanes approach to our state's traffic challenges.

I also want to thank John McCuskey, who retired as Executive Director December 31, 2015. He led E-470 to a long list of accomplishments during his tenure. And I want to extend a warm welcome to our new Executive Director, Tim Stewart.

Finally, I want to thank our present and past staff and board members, member governments, outside partners, bond investors and, especially, our customers. You have helped us achieve so much over the past quarter-century.

Josh Martin, Chair, E-470 Board of Directors



Above: E-470 toll plaza.

Below: Vehicle at far left is in a newly installed U.S. 36 Express Lane, with toll collection via ExpressToll.



### **2015 Financial Overview**

#### **2015 OPERATING REVENUES**

	2015 Budget	2015 Actual
Tolls	\$ 165,751,000	\$ 173,039,512
Other fees	4,690,000	6,528,828
Vehicle Registration Fees	10,078,600	10,095,783
Unrestricted Investment Income	6,000,000	5,898,264
Other Income	3,247,500	4,473,789
Total	\$ 189,767,100	\$200,036,176

#### 2015 REVENUES: \$200 MILLION



#### 2015 OPERATING BUDGET

	2015 Budget	2015 Actual
Operating Revenues	\$ 189,767,100	\$ 200,036,176
Operating Expenses	(41,296,800)	(37,925,250)
Vehicle registration fee debt service	0	0
Net income available for senior debt service	<u>\$ 148,470,300</u>	\$162,110,926
Aggregate senior bonds debt service	<u>\$ 91,309,100</u>	<u>\$ 91,119,525</u>
Senior bonds debt service coverage ratio	1.63	<u>1.78</u>

#### 2015 DEBT SERVICE COVERAGE



As reported in the audited financial statements issued by the Authority on April 13, 2016.

### **2015 Financial Statements**

# STATEMENT OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION

	For the Year Ended December 31, 2015
Operating Revenues	
Tolls	\$ 173,039,512
Other fees	6,528,828
Tolling services	2,341,155
Total operating revenues	181,909,495
Operating Expenses	
Toll road operations	32,005,157
Salaries and benefits	7,041,501
General and administrative	2,339,371
Total operating expenses	
before depreciation	41,386,029
Depreciation expense	35,426,200
Total operating expenses	76,812,229
Operating income	105,097,266
Non-Operating Revenues (Expenses)	
Vehicle registration fees	10,095,783
Investment income	2,989,433
Change in fair value of derivative instruments	
and investments	(1,685,628)
Interest expense	(99,060,982)
Other income (loss)	(704,505)
Total non-operating expenses, net	(88,365,899)
Change in net position	16,731,367
Net Position, beginning of year	(552,622,768)
Net Position, end of year	\$ (535,891,401)

# STATEMENT OF NET POSITION

	As of December 31, 2015
Assets and Deferred Outflows of Resources	
Current unrestricted assets	\$ 161,615,456
Current restricted assets	57,498,869
Capital assets (net of accumulated depreciation)	591,458,677
Other noncurrent assets	169,902,709
Total assets	980,475,711
Deferred outflows of resources	98,594,860
Total assets and deferred outflows of resources	1,079,070,571
Liabilities	
Other current liabilities	30,955,102
Current bonds payable	80,960,000
Other noncurrent liabilities	57,985,262
Noncurent bonds payable	1,445,061,608
Total liabilities	1,614,961,972
Net Position	
Net investment in capital assets	(70,707,875)
Restricted for debt service	23,007,951
Unrestricted	(488,191,477)
Total net position	(535,891,401)
Total liabilities and net position	\$1,079,070,571





.bove: E-470 workers installing ExpressToll nfrastructure for CDOT's I-70 Mountain Express Lane.

Below: E-470's annual toll rate increases are a part of the plan of finance that was originally approved in 1995 and amended in 2010.





**EXPRESSTOLL ACCOUNTS** 

Commercial area. Arapahoe County





Residential and shopping area, Aurora.

### **Financial Highlights**

#### SINCE 2010, A CONTINUING SURGE IN TRAFFIC AND NET TOLL REVENUES

Traffic and net toll revenues reached new heights in 2015, further supporting E-470's overriding goals: continuation of a stable debt management program with ample reserves and liquidity, and the capacity to self-fund its capital program.

Here are the financial highlights for the year:

- Traffic, as measured by the number of toll transactions, increased 12.4% over 2014, with transactions rising from 66.4 million to 74.6 million. It was the sixth straight year of traffic growth.
- The 74.6 million transactions were 105% of E-470's 2015 70.8 million projection.
- E-470 broke its all-time, single-day traffic record. The new record is 284,690 transactions, set on December 18, 2015. The prior record, set on December 19, 2014, was 250,165 transactions. That number was exceeded 55 times during 2015.

- A total of 124,821 new ExpressToll accounts were opened in 2015, bringing the total number of accounts to 619,245. Total transponders outstanding was 1,262,827.
- The rise in traffic, coupled with a 2015 toll increase, resulted in a 15.0%, \$22.6 million increase to \$173.0 million in net toll revenues.
- The 15.0% growth in net toll revenues was sufficient to meet E-470's financial obligations, including its 2015 \$91.1 million debt service.
- Operating costs were \$37.9 million in 2015, compared to the \$41.3 million budgeted. The 2015 actual operating costs compare to \$33.0 million in the prior year, a 15.0% increase. A significant portion of the Authority's increased operating costs are directly related to processing and collecting the growing volume of tolls. While E-470's operations costs have risen, that is in part due to the growth in ExpressToll services provided to other tolling agencies.



The purple line shows proposed alignment of the two-mile E. 6th Parkway extension to the existing E. 6th Parkway interchange at E-470. Details on Page 4.

The incremental costs incurred on behalf of other tolling agencies are reimbursed by the applicable toll operator of each facility to the Authority under Tolling Services Agreements.

#### **STABLE DEBT AND CASH MANAGEMENT**

E-470 has approximately \$1.5 billion in outstanding bond debt. In 2015, E-470 made \$91.1 million in debt service payments to bondholders. The debt service obligation is scheduled to increase annually until 2020, when the current debt management plan has it leveling off. In 2016 the debt service obligation is \$97.3 million.

E-470's cash management program also includes accumulating reserves to avoid taking on additional debt. In 2015, E-470 maintained sufficient reserves to self-fund its capital projects. Those reserves are making possible an over \$88 million road construction project in 2016 and 2017 to add a third lane in each direction along eight miles of the toll road in southeastern Aurora – all without issuing any new debt.

#### REQUIRED DEBT SERVICE COVERAGE RATIO EXCEEDED

Debt service coverage for 2015 was 1.78 – much more than the debt service coverage ratio of 1.30 required per the Master Bond Resolutions. The actual ratio exceeded the 1.63 budgeted and was the highest E-470 has ever achieved, an accomplishment bound to engender even more confidence in E-470 among bond investors.

#### A BOOST FROM THE BOND RATING AGENCIES

During 2015, the three major bond rating agencies showed they had taken note of E-470's financial achievements. Between February and May, all three agencies upgraded the investment-grade ratings for E-470's 2015A \$41.55 million senior revenue bonds and all parity debt, as follows:

- Fitch: BBB with a stable outlook; previously BBB- with a positive outlook.
- Standard & Poor's: BBB+ with a stable outlook; previously BBB with a stable outlook
- Moody's: Baal with a stable outlook; previously Baa2 with a stable outlook

The improved bond ratings ultimately result in lowering the interest expense on E-470's bond debt.

#### 2015 BOND TRANSACTIONS AND FUTURE PLANS

An issue of \$41.55 million in senior revenue bonds was offered to the public beginning Wednesday, June 10, 2015. The Series 2015A Senior Revenue Bonds are exempt from federal, state and local taxes for Colorado residents. The bonds sold out in a matter of minutes.

Additionally, E-470 used approximately \$78 million of its own unrestricted funds to pay down its debt.

The Authority's plan of finance includes capitalizing on two more refunding opportunities that are on the horizon that would help to secure level annual debt through final maturity in 2041.

#### E-470 YEARLY TOLL REVENUE AND TRANSACTIONS





E-470 traffic at its Thornton interchange with the Northwest Parkway.







#### YOUR KEY TO COLORADO! SIGN UP & GET THE LOWEST RATES



SIGN UP AT EXPRESSTOLL.COM



Above: Newly expanded ExpressToll Service Center, where 808,667 inbound calls were handled in 2015. Left: Cover of brochure positioning ExpressToll as serving all the state's tolled facilities.

# The billing and customer service backbone for statewide tolled facilities

#### GROWING TO MEET AN EXPANDED MISSION; BUILDING THE EXPRESSTOLL BRAND

E-470's ExpressToll operation has grown in support of the Colorado Department of Transportation (CDOT) and its ongoing strategy to employ Express Lanes to cope with traffic congestion and aging infrastructure in the absence of adequate taxpayer funding.

The ExpressToll Service Center, which has been providing tolling services to CDOT and the Northwest Parkway for years, was chosen by CDOT in 2015 to provide services to three new tolling facilities. E-470 was the toll integrator for all three facilities, including system and software development and installation services.

 The U.S. 36 Denver-Boulder Express Lanes. The first phase, from the U.S. 36/I-25 interchange in Denver to Broomfield/Superior, along with the reconfiguration of I-25 central, opened in July 2015. The second and final phase, to Boulder, opened in the spring of 2016.

- The I-70 Mountain Express Lane. This opened in December 2015 on a 13-mile stretch of eastbound I-70 in the foothills west of Denver.
- The six-mile extension of CDOT's managed lanes on I-25 Segment 2 from the U.S. 36/
  I-25 interchange north to I20th Avenue in Westminster. This is scheduled to open in 2016.

There are even more Express Lanes installations on the horizon for metro Denver. These include C-470, I-25 North Segment 3, and I-70 East. These are in the planning stages by CDOT.



Left graphic shows the standard ExpressToll "sticker" transponder that initiates the standard toll but does not identify HOV vehicles.

Right graphic shows a new hard-plastic "switchable" ExpressToll transponder in

its two display modes, TOLL or HOV. The mode can be switched by sliding an insert to the left or right.

HOV

TOLL

Augeneurite +

The CDOT program has thrust the ExpressToll Service Center into a much larger role, prompting E-470 to establish a Toll Services Department and reposition ExpressToll as its own standalone brand, no longer synonymous with E-470 but instead the standard "one-stop toll shop" for electronic tolling throughout the state. E-470 operates more than a road. It operates an integral component of the route to improving statewide mobility through tolling.

Successfully introducing these new tolled installations to the public requires clear communication, explaining to Express Lane travelers in the simplest terms possible how the new tolling installations work and how to obtain an ExpressToll transponder and save money instead of being billed at a surcharge via License Plate Toll.

Making clear communication somewhat more challenging has been the introduction of an optional new type of transponder. This hard-plastic "switchable" windshieldmounted ExpressToll transponder enables U.S. 36 and I-25 Express Lanes customers to slide a bar on the device to signify whether they should be charged a toll or treated as an HOV (High Occupancy Vehicle) customer and drive for free in the Express Lanes.

 E-470's marketing and communications staff worked in close coordination with CDOT and its concessionaire, Plenary Roads Denver, to help educate customers about these new installations and the related role of the ExpressToll Service Center.

- E-470's first priority was to make sure that all E-470 and ExpressToll Service Center staff were properly trained and able to convey simple, consistent messages about the new tolled facilities.
- E-470's marketing plan for the year included a special focus on communication about the new HOV/tolled facilities to all customers. Channels utilized included the website, e-blasts dedicated to educating and answering questions, social media campaigns and inserts to License Plate Toll customers' statements.
- The ExpressToll Service Center, which is based at E-470's headquarters and operated by E-470's contractor, Parsons Brinckerhoff Alltech (PBA), was expanded from providing seating for 38 PBA callcenter staff to 60 seats in anticipation of an ongoing increase in calls spurred in large measure by the new tolled facilities. PBA's image-processing staff seating was expanded from 27 seats to 40 in expectation of processing more than four million images per month. (The actual total images processed in 2015 were 50.2 million.)
- The call center increased its operations schedule from just weekdays to six days a week in July, and then moved to seven days a week in November.

The call center demonstrated it was well equipped to handle the increased volume, and increased complexity, of customer questions and concerns.

- The after-call survey (where callers are asked to rate the call center service they just received) average satisfaction level was 4.93 out of a possible 5.
- A survey of nearly 35,000 customers showed these results:
  - ExpressToll Customer Satisfaction = 4.59/5.0 (up from 2014)
  - License Plate Toll Customer Satisfaction = 4.66/5.0 (up from 2014)

### E-470's positive economic impact

Thirty years ago, when E-470 was just a concept instead of a reality, a study conducted by King & Associates for E-470 predicted the toll road would have a major positive economic impact in the E-470 corridor and throughout the six-county Metropolitan Statistical Area (MSA). Now a follow-up study recently conducted for E-470 by Economic & Planning Systems, Inc. proves the original study's positive predictions were valid.

#### **Property Valuation**

- Since 1986, E-470 has been the catalyst for \$38.4 billion in real estate value along its 47-mile long corridor, and \$10.5 billion more than forecasted 30 years ago.
- The corridor contributes \$467 million in annual property taxes, \$290 million per year more than projected.
- Today, 407,000 people live in the corridor 394,000 more than in 1986.
- There are more than 132,000 jobs located in the corridor.

#### Wages, Income, Output, and Gross Regional Product

 Total business and household spending (output) in the corridor is \$25 billion per year, which is 12% of the MSA's total output; the corridor's Gross Regional Product (GRP) is \$14.2 billion, also 12% of the MSA's.

#### Travel Time and Safety Benefits

- Without E-470, MSA residents would spend 14.8 million more hours driving per year (and 20 million more hours in congestion), translating to lost productivity and lower quality of life.
- As a result, the value of travel time savings E-470 provides is \$51 million per year, net of E-470 toll revenues.
- E-470 is also responsible for the avoidance of nearly \$24 million in costs related to accidents, injuries, and fatalities per year by moving traffic to a safer road type.

#### **Administrative Operations**

 Annually, E-470's operations contribute approximately \$54 million in GRP to the MSA, inducing an additional \$60 million in GRP contributions.



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